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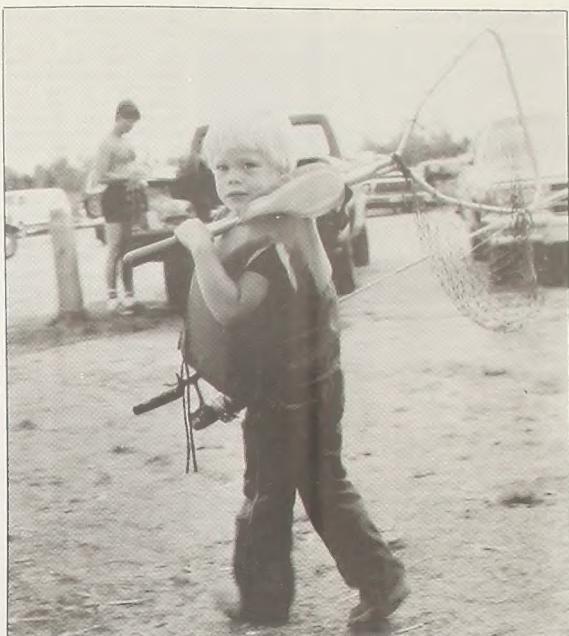
Fisheries in the Simcoe District

Planning for the Future



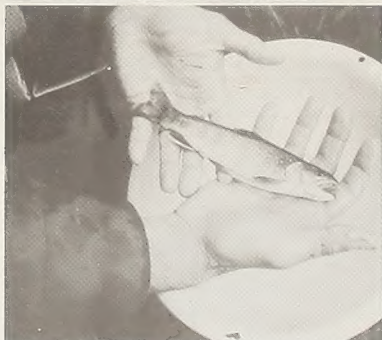
Ministry of
Natural
Resources

Hon. Vincent G. Kerrio
Minister
Mary Magford
Deputy Minister



Who is the Ministry of Natural Resources?

We are a ministry of the provincial government concerned with the wise use and management of land, water, trees, fish, wildlife and minerals for the benefit of all Ontarians.



Do you want speckled trout to be part of the angler's creel in the year 2000? Read the draft fisheries management plan for the Simcoe District to see what the ministry is doing about it.

What is the Simcoe District?

Simcoe is one of the Ministry of Natural Resources' 47 districts in Ontario. The districts are the operational level of the ministry where the management of natural resources actually takes place. The 47 districts are grouped into 8 administrative regions which report to Main Office in Toronto.

The centre spread of this tabloid is a map of the Simcoe District showing the boundaries and some of the management activities related to fisheries.

The land base within the Simcoe District is 95% privately owned. The fish resource in the water on that land, the fishery, is a provincial resource, belonging to the people of Ontario. The Ministry of Natural Resources has the responsibility of fisheries management including the following provincial objectives:

Sport Fishing

- to meet demand within the limits of a wisely managed and rehabilitated resource;

Commercial Fishing

- to maintain a viable industry;

Bait Fishing

- to maintain current production; and
Provincially rare and endangered species
- to prevent the extinction of any native species.

What is a District Fisheries Management Plan?

The management plan is a document that identifies what fish are where and whether the number of fish is great enough to meet the demand, now and in the foreseeable future. The demand comes from anglers and commercial fishermen.

The plan serves both the public and the ministry fishery managers. For the public, it sets out how the resource is to

be managed. For the manager, it provides long-term direction and goals toward which to work.

Long-term direction is in the form of specific fishery management objectives to be achieved by the year 2000. These are summarized on the centre spread.

Problems that affect the fisheries resource and could prevent achievement of the

objectives are identified. Management action designed to resolve the problems are identified and scheduled for implementation over the next five years (1987-1991).

Your role is to help us determine the demand, identify the problems and establish the long term direction that we all agree will help us reach our management objectives by the year 2000.



A viable commercial fishery provides food, employment and improves Canada's balance of trade.

The Planning Process

A planning team, consisting of David Reid, Larry Halyk, and Jim Collins of the Simcoe District staff with Norm Smith of the Southwestern Regional office in London, was formed early last year. A schedule for completion of the plan in stages was set.

The first major step was the assembly of a detailed background information report. This report contains extensive fisheries related information in the form of tables, maps and text. It was completed in the summer of 1986. The background report is what tells what fish are where in the Simcoe District - an inventory of the resource.

If, for example, you want to know the number of smallmouth bass harvested from Long Point Bay in the last few decades, you can find the answer in that report. The number of brook trout stocked in local streams, the size and depth of the Deer Creek reservoir and the amount of enforcement time spent on sport vs. commercial fishing are examples of the different kinds of information contained in the background information report. A copy is available at the Simcoe District Office for your use.

A fisheries advisory group was formed last summer. It is made up of 10 members of the local community with a wide range of fisheries interests. They have contributed to various stages of the management plan by reviewing the

work in early stages and helping the planning team get public input. The advisory group will continue to be involved as the fisheries management plan is implemented. They will, among other things, inform the planning team of public reaction to fishery issues.

A report called "Background Information and Optional Management Strategies and Options, 1986-2000, A Summary" was produced as an abbreviated version of the detailed report. Copies (700) of this summary were distributed to a wide variety of people last fall. A questionnaire was included with the summary and public comment was encouraged.

The planning team made 20 slide and talk presentations to

Club, Simcoe Rotary Club, Eastern Lake Erie Trawlers' Association, a press conference for local media, etc. The presentations introduced and briefly explained the summary report and encouraged comments.

The public input to the recently released Draft Management Plan consisted of 53 completed questionnaires returned to the district office by February, 1987; comments made to the planning team at the slide and talk presentations; and, comments received through the fishery advisory group. This input influenced the content and direction of the plan.

Opportunities for further public input to the final plan are provided through the open house at the district office March 23-27 and at the Long



local groups last fall. Some of these were the Township of Norwich Council, Langton Lions Club, Brant Rod and Gun

Point Area Fish and Game Club's fishing seminar at the Port Rowan Community centre on March 28.



Fishing piers at the Port Ryerse and Van Norman Public fishing areas are well used from ice out to freeze up. Smelt are dipped in the spring, trout and salmon are angled throughout the open water season and yellow perch, sunfish and smallmouth bass are angled in summer.

A Variety of Fish and Fisheries Trout and Salmon

Brook or speckled trout are native to the 535 km (332 miles) of coldwater streams found in the Simcoe District. Their range has been reduced to 136 km (84 miles) by habitat destruction and competition from introduced trout. Wild populations still occur in many small creeks in the district.

Brown and rainbow trout were both introduced into local coldwater streams in the early 1900s. Now wild populations of both species reside permanently in or migrate through about 100 km (62 miles) of local trout streams. Naturalized populations of introduced coho, pink and chinook salmon are also found in a few of these streams.

Popular fishing spots for these fish are stocked ponds, private fishing preserves, coldwater streams, fishing piers at stream mouths, and on Lake Erie off the tip of Long Point.



Increased numbers of steelhead are expected to return to Big Creek beginning in the spring of 1987. This is due to previous stockings of a new trout strain raised at the Normandale Fish Culture Station.

Summer Boat Fishery

Long Point Bay is renowned for excellent smallmouth bass fishing. Over a thousand boats can be found on Inner Bay opening day of bass season. A majority of fishing and boating activity is concentrated in July when smallmouth bass fishing is at its best, although fishing does occur May through September.

Other species harvested by this warmwater fishery include largemouth bass, yellow perch, rock bass and northern pike.

Rare and Endangered Fish

Several fish species considered rare or endangered in Canada have been found in Simcoe District waters. These include the spotted gar, central stoneroller, pugnose shiner, brindled madtom, grass pickerel, lake chubsucker, longear sunfish and least darter.



The summer boat fishery on Long Point Bay is one of the largest recreational fisheries in Ontario. Less than five per cent of the anglers involved travel from outside Ontario.

Commercial Bait Fishery

Almost 500,000 dozen bait-fish are harvested annually from Simcoe District waters. The majority are emerald shiners which are captured by seine nets while congregated in large schools in near shore waters of Lake Erie in spring

and fall.

With a wholesale value of almost \$100,000 local minnows are important sources of bait for winter ice fisheries on Inner Bay and on Lake Simcoe. Unfortunately, the supply of minnows sometimes falls short

of local demand during the summer boat fishery. At that time, the minnows move offshore and are unavailable to the 28 licenced bait fishermen.

Pond Fishing

Catchable size rainbow trout are purchased by the ministry from local fish farms and stocked in several ponds early in the trout season to provide recreation to many anglers unable or unwilling to fish on trout streams. Great places for the young, handicapped or elderly angler, stocked ponds also

serve to reduce fishing pressure on popular trout streams.

Warmwater fish are common in the 40 larger ponds located across the district. Most are inhabited by trophy-sized largemouth bass to tempt the more ardent angler along with panfish like perch, rock

bass, black crappie and bluegill, species readily caught by the novice.

Ponds owned and managed by the Long Point Region Conservation Authority provide excellent fishing conditions. Places to try are Deer Creek, Waterford Lakes and Little Lake conservation areas.



Commercial harvest of smelt is annually regulated by a quota assigned to individual licences.

Commercial Gill and Trawl Net Fishery

Port Dover is the home port for about 40 modern fishing tugs that fish the waters of eastern Lake Erie.

Almost 70% of the total smelt harvest from Lake Erie occurs in Simcoe District waters. An average of 7.5 million kg (16.5 million lbs.) of smelt with a dockside value of \$1.5 million is harvested in trawl nets by local fishermen.

Most are exported to Japan or the United States.

The total harvest of yellow perch, white bass and walleye together is less than 10% of the smelt catch. However, their dockside value is equal to that of the smelt because of their greater market value. The gill net fishery depends on these species.

Commercial Hoop and Seine Net Fishery

Centred at Port Rowan on Inner Bay, this fishery has 19 licences under which 198 hoop nets and 10 seine nets are operated. Major target species are rock bass, crappie, sunfish, yellow perch and northern pike. Undersized and game fish are released unharmed.

Commercial fishermen are prohibited from operating on the Inner Bay between May 12 and August 31. Mean annual harvest over the last 10 years is 116,000 kg/yr. for an estimated landed value of \$202,647.



Mandatory ice hut registration and a removal date of March 15 were initiated during the past season. These regulations will help to control ice hut removal and assist enforcement.

Fish Farming

The fish farming industry in the Simcoe District has experienced tremendous growth in the last 15 years. Since 1972, the number of operations licenced by the Ministry of Natural Resources has risen

from four to 22.

Most of these farms raise rainbow trout from fry to pan-size in groundwater fed raceways. They are for sale to restaurants and in the fresh fish market.



Winter Ice Fishing

Yellow perch are the mainstay of this fishery – the duration and extent of which is highly dependent on weather and ice conditions.

Over 500 ice huts were

registered with the Simcoe District office this winter as mandatory registration was implemented on Long Point Bay during 1986.



About 10,000 kg (22,000 lb.) of black crappie or calico bass are harvested annually by the commercial hoop and seine net fishery in Inner Bay. Most are sold on the fresh fish market.

Objective 1: To meet the projected demand for trout fishing in the Simcoe District by increasing resident trout numbers in inland waters by 20% and migratory trout numbers in Lake Erie and its tributaries by 15%.



Require that sediment basins be constructed in all new agricultural drains upstream of trout habitat.

Objective 2: To increase angling activity for non-trout fish species on ponds and streams by 20%.



Introduce channel catfish into suitable warmwater ponds to improve the composition of the fish community and increase angling activity on inland ponds.

Objective 3: To meet the increase in demand for smallmouth bass angling opportunities in Long Point Bay by increasing the average bass population over the long term by 15%.

Objective 4: To increase sport fishing activity for non-salmonid fish species in Long Point Bay and Lake Erie by 25%.

Objective 5: To maintain a viable commercial fishing industry in Lake Erie that continues to harvest commercial fish species at a biologically allowable level.

Objective 6: To prevent over harvest of baitfish in Lake Erie.

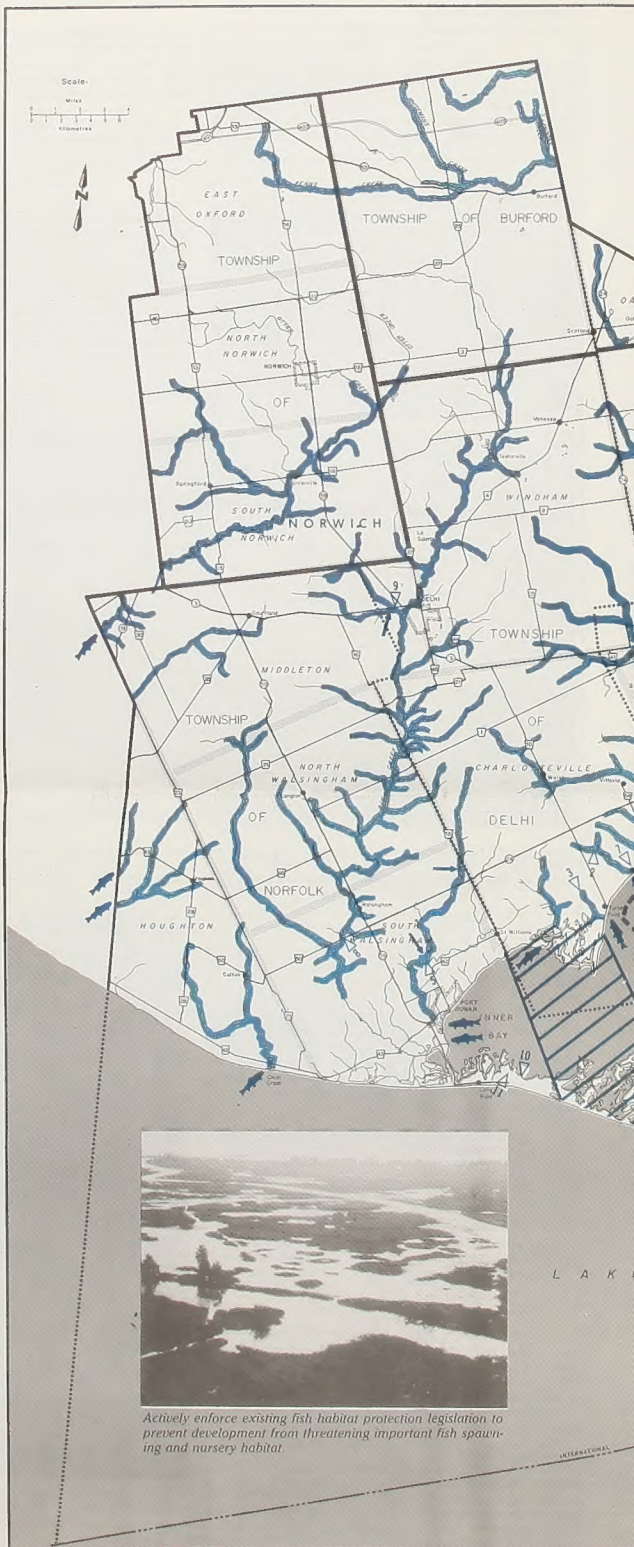
Objective 7: To obtain accurate estimates of allowable harvest for all sport and commercial fish species in Lake Erie.

Objective 8: To prevent the decline or extinction of rare or threatened fish species.

Objective 9: To increase fish viewing recreation by 25%.

Objective 10: To foster an attitude of stewardship toward the fishery resource and courtesy toward landowners among users who share the resource.

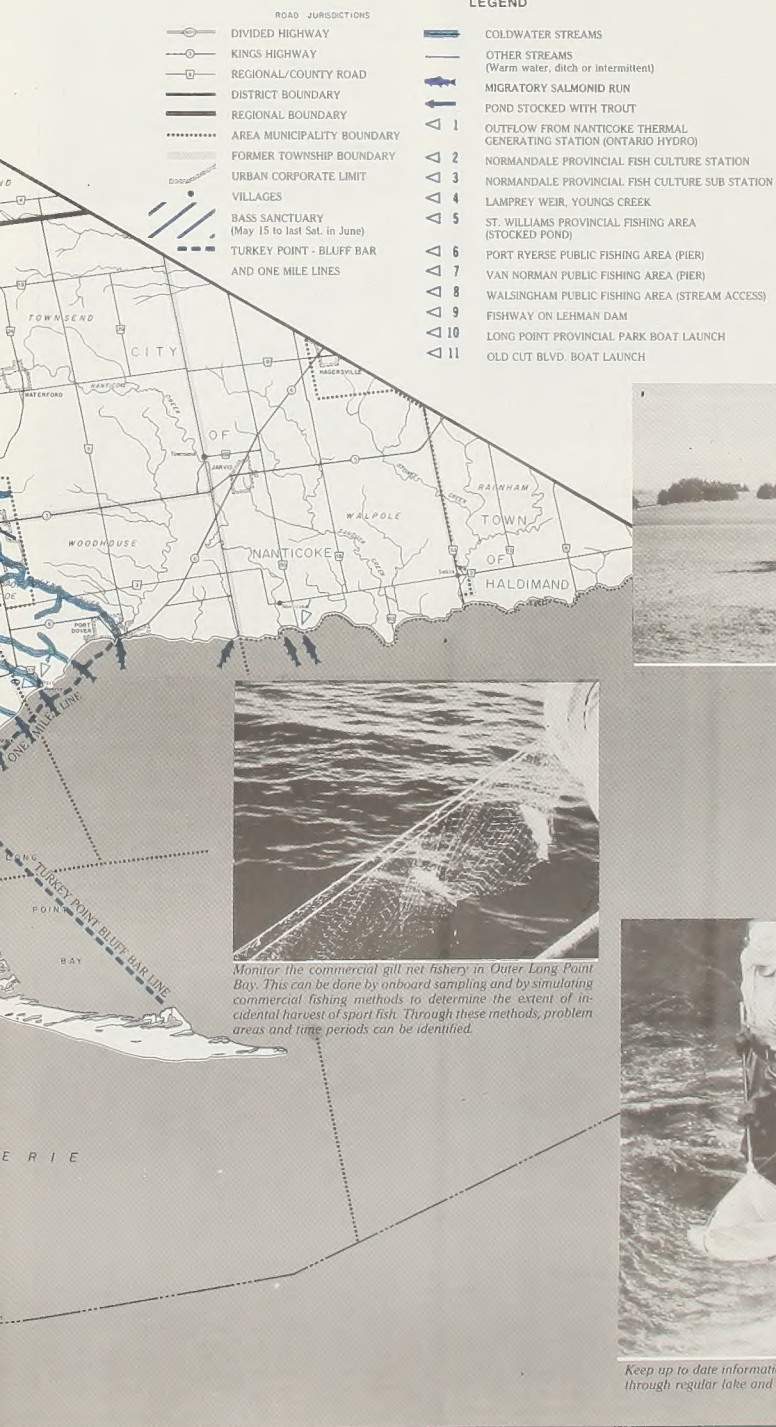
Objective 11: To keep the public informed about fishing opportunities and fisheries issues and to increase public participation in the management of local fisheries resources.



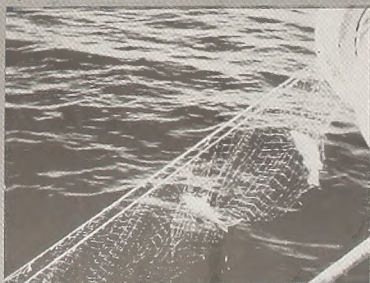
Actively enforce existing fish habitat protection legislation to prevent development from threatening important fish spawning and nursery habitat.

Simcoe District Fisheries

Management Objectives



Promote soil conservation and stewardship toward our natural resources through, for example the use of farm windbreaks and cover crops.



Monitor the commercial gill net fishery in Outer Long Point Bay. This can be done by onboard sampling and by simulating commercial fishing methods to determine the extent of incidental harvest of sport fish. Through these methods, problem areas and time periods can be identified.



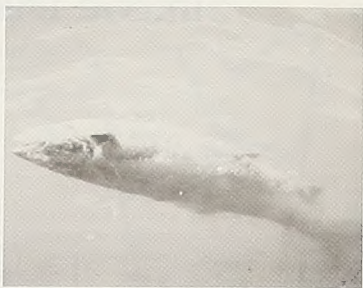
Keep up to date information on fish populations and habitats through regular lake and stream surveys.

Fisheries Problems and Issues

Nineteen problems and issues affecting the local fisheries listed below were identified in the summary report "Background Information and Optional Management Strategies, 1986-2000" for the Simcoe District management plan.

1. The present production of stream trout does not satisfy angling demand.
2. Sedimentation in coldwater streams.
3. Impact of dams on coldwater streams.
4. Impact of water extraction on coldwater streams.
5. Water quality deterioration.
6. Underutilized warmwater ponds and streams.
7. Illegal harvest of spawning migratory salmonids.
8. Angler harvest of juvenile rainbow trout.
9. Affect of hatchery reared trout on wild populations.
10. Angler access to private land.
11. Underutilized fish viewing opportunities.
12. Long Point Bay sport fishery overly dependent on smallmouth bass.
13. Shoreline development effects on fish habitat.
14. Demand for baitfish periodically exceeds supply.
15. Underutilized sport fishing areas in Lake Erie.
16. Angler - commercial fishermen conflicts.
17. Underutilized fish species.
18. Inadequate knowledge of angler preference and demand.
19. Limited knowledge of resource capability.

Other issues suggested during public review of the summary report include: effect of high water levels in Lake Erie; pre-season and overlimit harvest of smallmouth bass from Long Point Bay; sea lamprey predation; overharvest of yellow perch by ice fishery on Inner Bay; dredging of coldwater streams; posting of private and CWS marshes on Long Point Bay; angler harvest of juvenile fish; and, poor ethics of ice fishermen.



Fish kills have occurred locally due to accidental spills of anhydrous ammonia, manure and fruit and vegetable processing waste. Water quality is lowered by nutrients from sewage, manure and fish farm outflow that stimulate excessive plant and algae growth.

Water Pollution

Nutrients added to streams, ponds and lakes can stimulate plant and algae growth to the point that water quality and fish habitat suffer. Nutrient sources include outflow from sewage treatment plants, livestock operations, industries and fish farms. Less direct contributions of nutrient come from eroded soil and drainage from cropland.

Long Point Bay Fishermen Prefer Smallmouth Bass

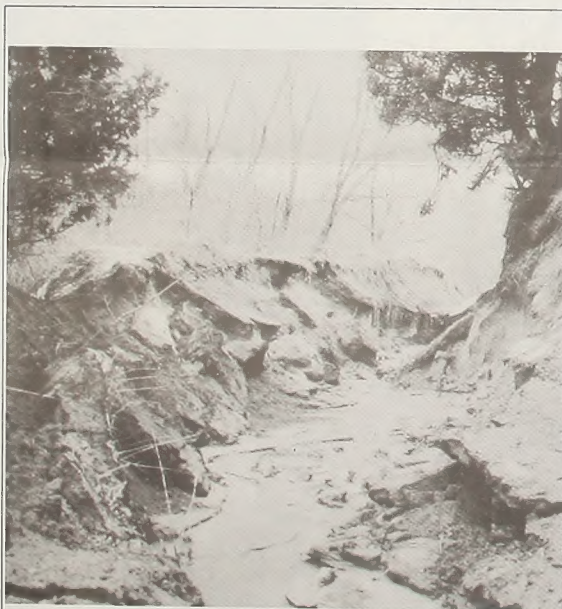
Despite the wide variety of other fish available, the summer boat fishery on Long Point Bay tends to concentrate on one species and good fishing is short in duration. This brief but exclusive interest in smallmouth bass is not good for the bass population or the tourist industry in the Long Point Bay area.

Shoreline Development Threatens Fish Habitat

The marshes on Long Point Bay are extremely important to the existence of a healthy fishery. Dredging and filling for development of cottages or marinas destroys fish spawning and nursery habitat. Dykes might improve this habitat but they restrict fish movement to and from it.

Good Fishing Areas with Poor or Unknown Access

Adjacent to Long Point Bay are some good fishing areas that receive little attention from anglers. The shorelines between Turkey Point and Port Dover, east of Nanticoke and west of Long Point all offer good fishing. Improving access to these areas would include boat launches and fishing piers. Publicity of these areas and existing facilities would increase angler use and enjoyment.



Soil erosion leads to sedimentation of streams. Trout fail to reproduce on gravel spawning beds that are choked with sediment.

Sedimentation of Trout Streams

Stream sedimentation is presently the most serious threat to local trout streams. It results from gully erosion along valleys, sheet erosion off cultivated land and poor drainage ditch construction.

Trout fail to reproduce on sediment choked spawning grounds. Fish cover is lost when deep holes are filled by sediment.

Impact of Dams on Trout Streams

Two major effects of dams on trout streams have been observed. Dams prevent rainbow trout from reaching spawning beds that are on the upstream side. Also, streams can become too warm for trout since water held in a pool by a dam can warm up. Many brook trout populations have been eliminated downstream from dams for this reason.



A fishway on Quance Dam would allow migrating trout and salmon to reach spawning grounds in Big Creek above Delhi. Rainbow trout numbers would increase but wild brook trout numbers would likely decrease.

Fisheries Management Projects

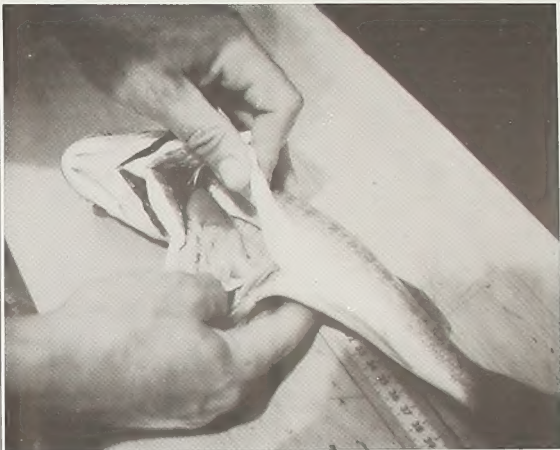
A variety of fisheries management activities have been carried out over the past decade in the Simcoe District by the ministry in co-operation with other agencies and area sportsmen's clubs. Following are brief descriptions of some management activities typical of the past few years.

- Plan review is part of the ministry's role in insuring the wise management of resources. As a review agency, we are asked to comment on plans for their impact on resource issues. One of the things we review plans for is how the proposal might affect fisheries.
- About 200 plans for work, development and management are reviewed each year. These involve things like road crossings on streams, aquatic herbicide applications to boat channels, dam construction, municipal drain construction or maintenance and zoning by-law changes to municipal plans.
- A 1983 feasibility study recommended a by-pass channel to pass fish over Quance Dam on Big Creek. The channel could have been constructed at an estimated cost of \$42,000.



Simcoe's four Conservation Officers and nineteen deputy C.O.'s make about 8,000 contacts with sport and commercial fishermen and lay about 60 fisheries related charges each year.

- A survey of Big Creek in 1985 found 540 sea lamprey nests between Lynedoch and Delhi.
- Maximum and minimum water temperatures were monitored on 16 trout streams at 30 locations from June 8 to September 1 of 1984. Temperatures critical for trout survival were only encountered immediately downstream from dams with topdraw spillways.
- A stocking assessment study on Deer Creek found that about 14% of the 6,700 brown trout fry stocked in 1982 survived the first four months in the creek.
- From 1983 to 1985, 313 fish collections were made by seining in the shoreline marshes of Long Point Bay. This resulted in the identification of 37 different fish species inhabiting the bay.



A 1979 survey of smallmouth bass caught by anglers in Long Point Bay revealed that the peak spawning period that year was the last week in June and first week in July.

- Junior Rangers cleared debris and streamside brush from 935 metres of Stoney Creek to flush sediment and lower the water levels.
- A large eroding gully was stabilized on a farm along Young Creek in 1979.
- The Ministry of Natural Resources' dam on Normandale Creek was removed in 1980. This lowered downstream water temperatures and gave migratory trout access to upstream spawning grounds.
- A 140 square metre walleye spawning bed was created in Big Creek by adding 222 tons of rock downstream from Regional Road 16.
- About 6,000 cubic metres of sediment were dredged from the Victoria mill pond in 1982 to increase its effectiveness as a sediment basin on Young Creek.
- Instream logs and debris were removed from 15 km of Vennison Creek to flush sediment eroded from gullies. The ministry and the Township of Norfolk co-operated on this project.
- Information and advice was provided to 85 people interested in fish farming in 1986.



Adult walleye (4,500) were captured in the Thames River and transferred into Big Creek between 1982 to 1986. The purpose of the transfer is to re-establish a walleye population in Long Point Bay that reproduces in Big Creek.



A 500 metre section of Clement Drain was hydroseeded to investigate the cost and effectiveness of this form of bank stabilization. Grass seed is mixed with water and sprayed onto areas to be planted.

- Between 1982 and 1985, 28 Community Fisheries Involvement Projects were administered in the Simcoe District. Local clubs volunteered 5,430 hours of work, rehabilitated 3,450 metres of stream, collected 330,597 trout eggs and stocked 114,517 trout fry in local streams.
- The Normandale Provincial Fish Culture Station is the only rainbow trout hatchery operated by the ministry. In 1985, 8990 kg (20,000 lb.) of trout were raised at Normandale, including 328,000 yearling rainbow trout and 133,000 yearling brown trout.

Resident Sport Fishing Licence Revenue

Ontario introduced a resident sport fishing licence in 1987. People aged 18 to 64 years old must purchase a \$10.00 licence if they want to fish in Ontario. Senior citizens are not required to purchase a licence, nor are disabled persons or status Indians fishing on their reserves and treaty areas.

Funds equivalent to the amount generated through licence sales will be put back into Ontario's fisheries. Provincially, this will amount to an estimated \$8 million annually. Simcoe District's share will be about \$200,000, depending on final licence sales. This amount will be added to the ministry's existing fisheries program budget. Revenue generated by licence sales will make the implementation of more projects identified in the fisheries management plan possible.

Among the projects that will potentially be implemented or expanded in 1987 are:

- An increase in the number of catchable sized rainbow trout stocked in put and take ponds at Waterford, Delhi and St. Williams. In 1986, 2,200 were stocked and we would like to stock 13,000 in 1987.
- The facilities at the Normandale Fish Culture Station can be further expanded to accommodate the rearing of Atlantic salmon and Skamania steelhead.
- Another project pending is the preparation and implementation of a stream improvement plan for Young Creek. This project will be in co-operation with the Long Point Region Conservation Authority, the Ontario Ministry of the Environment, the Ontario Ministry of Agriculture and Food, local municipalities, landowners and community groups.
- Surveys of anglers on Young Creek can be carried out to determine fishing pressure, success and total harvest. The data collected can be used to measure the effectiveness of stream improvement work.
- Upgrading of facilities at ministry boat launches on Long Point. This would improve angler access to the Long Point Bay Fishery.
- Biological surveys on Long Point Bay by the Lake Erie Fisheries Assessment Unit can be expanded. This would improve our knowledge of fish populations and the potential for harvest.
- Enforcement capabilities can be improved to protect fish stocks and their habitats by making better use of existing enforcement staff. Examples of how this can be done are improving their mobility to address "hot spots" and providing sophisticated equipment for their use. Additional staff may be required.



Expand biological surveys on Long Point Bay by the Lake Erie fisheries assessment unit. This will improve our knowledge of the fish population size and potential for harvest.



Survey anglers on Young Creek to determine fishing pressure, success and harvest. The data can be used to measure effectiveness of stream improvement work.



Upgrade ministry boat launching facilities on Long Point to improve angler access to the Bay.

What should you do to help?

Read the draft fisheries management plan and let us know what you think. Your comments will influence the contents of the final plan to be published this spring. This is your opportunity to influence the future of your fisheries.

Get involved in projects that improve the district fisheries. The Community Fisheries Involvement Program is an excellent way to do this.

Submit your comments or questions to:

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